

## CLAIMS

1. A method of receiving a signal propagated over a signal channel, comprising receiving and demodulating the signal, equalising the demodulated signal in a first operation to counter a first type of distortion and in a second operation equalising the signal from the first operation to counter a second type of distortion.

2. A method as claimed in claim 1, characterised in that the equalisation in the first operation is to counter distortion introduced by the signal channel.

3. A method as claimed in claim 1, characterised in that the equalisation in the first operation is to counter intersymbol interference (ISI).

4. A method as claimed in claim 2 or 3, characterised in that the equalisation in the second operation is to counter distortions introduced by transmitting and receiving equipments.

5. A method as claimed in claim 4, characterised by training an equalising stage used in the first operation using a first training sequence which includes the non-linear characteristics present in the transmitting and receiving equipment.

6. A method as claimed in claim 4 or 5, characterised by training an equalising stage used in the second operation using a second training sequence which counters the non-linear characteristics present in the transmitting and receiving equipment.

7. A method as claimed in claim 1, characterised by storing training sequences for respective couples of transmitting and receiving equipments

and by selecting the optimum training sequence for a currently used couple of transmitting and receiving equipments.

8. A receiver comprising means for receiving a signal propagated over a signal channel, means for demodulating the received signal, a first equalising stage coupled to the demodulating means for countering a first type of distortion and a second equalising stage coupled to the first equalising stage for countering a second type of distortion.

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10 9. A receiver as claimed in claim 8, characterised in that the first equalising stage includes means for storing a first training sequence and the second equalising stage includes means for storing a second training sequence.

15 10. A receiver as claimed in claim 9, characterised by means for storing a plurality of the first and second training sequences for respective couples comprising the receiver with different transmitters and means for selecting an optimum training sequence for a currently used couple.